DATA PRESERVATION AND REINTERPRETATION

Ana Trisovic, Harvard University previously with: LHCb, CERN Open Data and CERN Analysis Preservation

Snowmass Community Planning Meeting October 6, 2020

"Ten or 20 years ago we might have been able to repeat an experiment. They were simpler, cheaper and on a smaller scale. Today that is not the case. So if we need to re-evaluate the data we collect to test a new theory or adjust it to new development, we are going to have to be able reuse it."

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Data reinterpretation or testing new theories

Conduct new measurements and improve old

Verify, reproduce, build upon old results

Newcomer training and education

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Data preservation & dissemination

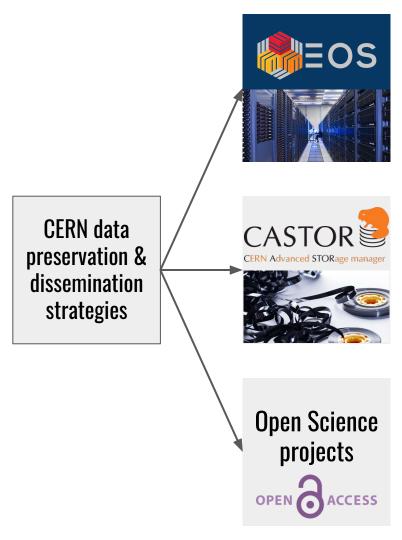


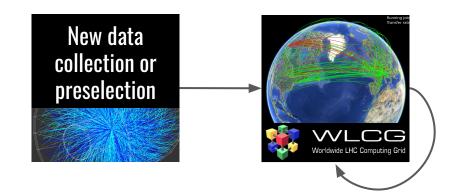
CERN data preservation & dissemination strategies

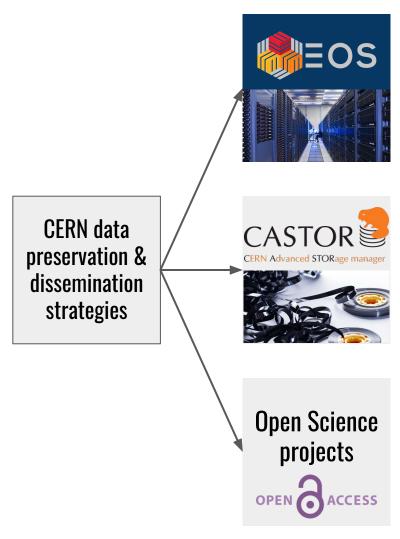


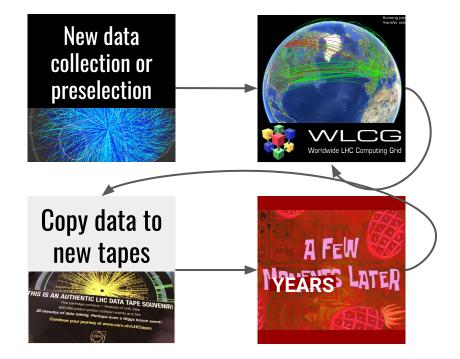
Open Science projects

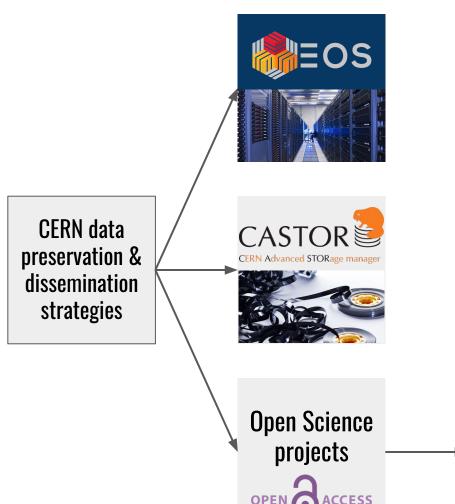


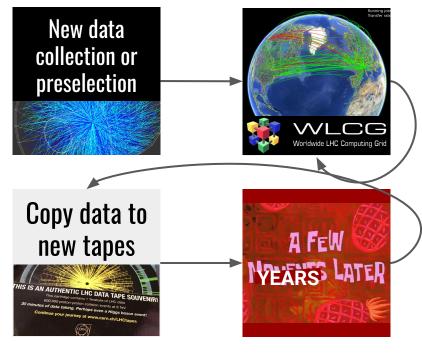






















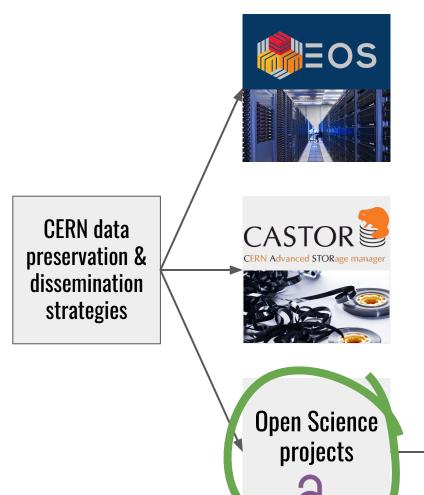
Open is not enough

Xiaoli Chen^{1,1}, Sünje Dallmeier-Tiessen¹¹, Robin Dasler¹¹, Sebastian Feger^{1,2}, Pamflos Febianos¹, Jose Bento Genzaler¹, Harri Hirvossalo^{1,1}, Disos Kousidir, Artemis Lawas¹, Salvatore Mele¹, Diese Rodriguer¹, Thors Simbo¹, Time Simb¹, Am Tisosicita, Aman Tarcinska¹, Ionneis Tsanaktsidis¹, Manbus Zimmermann¹, Kyle Crammer¹, Lukas Heinrich¹, Gordon Watta¹,

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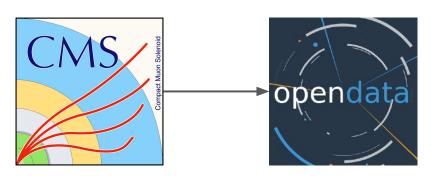
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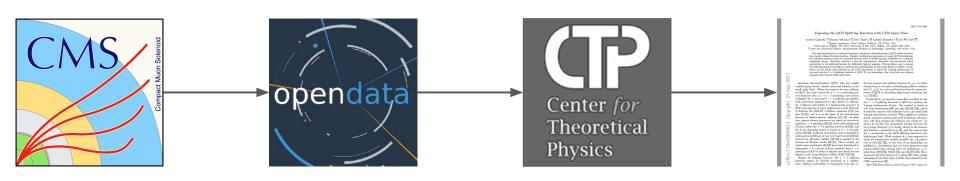
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- Resources for data reinterpretation can initiate new collaborations.
- Providing outreach and education resources may positively impact future grant applications.
- Get new physics results.

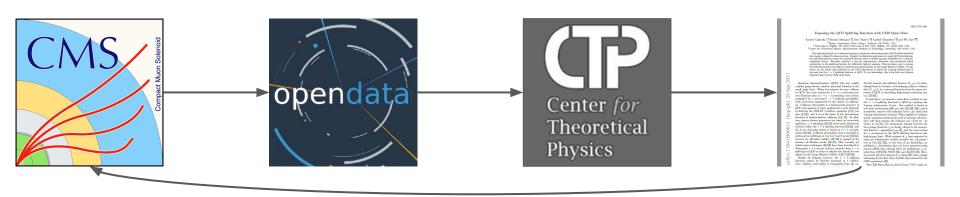
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Conclusion: To maximize the potential of your HEP experimental data and reap the benefits of open science, it is essential to establish *open data policies* early-on in new collaborations.